
CHANGING EPIDEMIOLOGY: OUTBREAK OF MONKEYPOX

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Monkeypox is a viral illness endemic to African countries. 20 May 2022, W.H.O alarmed all countries on the outbreak of the monkeypox virus.¹ Symptoms include headache fever swollen lymph nodes lethargy and the development of rash. Two types of clades (strains) are found that is central and West African clades. A central clade is more infectious than a western clade. A western clade is self-limiting within 2-3 weeks with a case fatality rate of 1% while the central clade is a 10% fatality rate. Monkeypox virus causes monkeypox a zoonotic disease which belongs to the poxviridae family which is closely related to the smallpox virus.² Indicated from historical data smallpox vaccination with vaccinia virus (orthopoxviral) was 85% protective against monkey pox.³ Danish laboratory in 1958 discover the virus in monkeys from where its name monkey pox originates.⁴ The first case was discovered in a 9-month baby for the first time in Congo in 1970.⁵ A previous systematic review of the summer of 2018 described the epidemiological outbreak of the monkeypox virus.⁶ United Kingdom's first case was presented on 16 May 24, 2022, after laboratory confirmation.⁷ The incubation period of monkeypox ranges from 6-13 days with possible extension to 5-21 days. The illness consistently ends by 2-4 weeks. Smallpox vaccines provide adequate protection against the monkeypox virus. World health organization suggests that health workers who are treating or exposed to monkeypox patients or their laboratory samples be immunized against smallpox. Effective laboratory investigation is a significant measure for identification and management. PCR on multiple lesions from various sites can be utilized to diagnose the potential condition. It should be sent to the government public lab and the control & command center must be notified. Refrigerated (2-8c) samples should be sent within 5 days of collection. Sample of swab should be of nylon, polyester, or Dacron swab with plastic, wood, or thin aluminum shaft.

International support for increased surveillance and detection is important for monkeypox cases for understanding the changing epidemiology of the resurging disease. In the current environment of pandemic threats, the public health importance should not be underestimated. Outside of African countries appearances of cases highlights the risk of geographical spread. Discontinuation of the smallpox vaccine has created a landscape for monkeypox. Government guidelines for emergency diseases should be used with proper notification of case reports to the directorate. Personal protection equipment with equipped labs should be provided. All children less than 12 should be vaccinated with smallpox vaccines. A combination of standard, contact, droplet and airborne precaution should be used. Place the patient in a single room with a portable HEPA filter or airborne infection isolation room. Staff from equipped laboratories should obtain samples from suspected/confirmed monkeypox virus infection. Appropriate personal protective equipment (PPE) should be provided and disposed of properly before leaving the room. Monitoring and tracing contact must be maintained and recorded. World health organization effective hand hygiene five moments should be performed by healthcare workers frequently. Use guidelines for correct containment and disposal of contaminated waste. Be care full always with the soiled laundry to avoid contact with lesion material and used PPE materials. Ensure procedures are in place for cleaning and disinfecting environmental surfaces in patient care zones. Always use the government of Pakistan's national health guidelines for emergencies.

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